

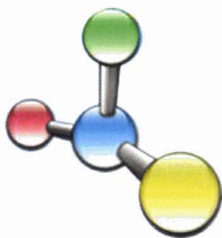


VISUAL ANALYTICS INC.

Superior Pattern Discovery Solutions

...with the Power to Predict and Prevent

VISUALINKS SYSTEM REQUIREMENTS



VisualLinks is written entirely in Java™ and will run on any platform that supports Java 1.6.

Visual Clarity Server Requirements

Following are the minimum system requirements for the machine running the Visual Clarity Server.

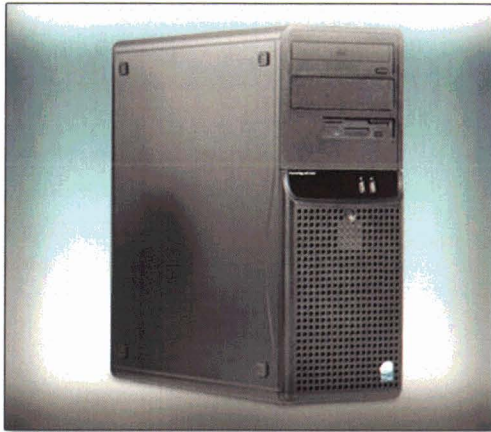
	Visual Clarity Server
Platform	Microsoft® Windows® 2000, 2003, 2008, XP, Vista, or Windows 7 Linux® Sun® Solaris™ IBM® AIX® 32 bit Operating System (minimum) 64 bit Operating System (recommended)
Processor	Single Pentium Xeon 2 GHz or higher (minimum) Dual Pentium Core-Duo Xeon 2.66 GHz or higher (recommended)
Memory	2 GB RAM (> 1 million records / 1-5 users) 4 GB RAM (1-5 million records / 5-10 users) 8 GB RAM (5-10 million records / 10-20 users) 32 GB RAM (10 million + records / 20-40 users) ^ 64 GB RAM (10 million records / 40 + users) ^ ^ In these large implementations, consider multiple server configurations.
Hard Drive Space	- 750 MB of available space of "temp" space (on the drive where you are installing from) - 350 MB of available hard drive space for the Visual Clarity Server installation - 400 MB of available hard drive space for the optional MySQL® database server installation
Network Support	Network Card (when supporting an Applet or Web Start Client)
Software	Java Runtime Environment (JRE) 1.6.0, Update 7 Database drivers (ODBC, JDBC, or native Java drivers) When supporting an Applet or Web Start Client: - Internet Information Services (IIS) 5.0, or - Tomcat (included with the VisualLinks software)

VisualLinks Client Requirements

Following are the system requirements for any machine running the VisualLinks Client.

Installed VisualLinks Client	Applet / Web Start Client
Microsoft® Windows® 2000, 2003, 2008, XP, Vista, or Windows 7 Linux® Sun® Solaris™ IBM® AIX®	Microsoft® Windows® 2000, 2003, 2008, XP, Vista, or Windows 7 Linux® Sun® Solaris™ IBM® AIX®
Pentium 4/1.5 GHz or higher (minimum) Pentium Core-Duo 1.6 GHz or higher (recommended)	Pentium 4/1.5 GHz or higher (minimum) Pentium Core-Duo 1.6 GHz or higher (recommended)
512 MB RAM (minimum) 1 GB RAM (recommended)	512 MB RAM (minimum) 1 GB RAM (recommended)
150 MB of available hard drive	Available hard disk space, on each machine that will run the VisualLinks Client, to store data and associated files
Network Card	Network Card
Java Runtime Environment (JRE) 1.6.0, Update 7 .Net Framework 2.0 (on any machine that will use the i2-to-VisualLinks Conversion tools)	Java Runtime Environment (JRE) 1.6.0, Update 7 .Net Framework 2.0 (on any machine that will use the i2-to-VisualLinks Conversion tools) -- or -- Internet Explorer 5.5 (or higher)
Minimum 1024 x 768 monitor resolution	Minimum 1024 x 768 monitor resolution

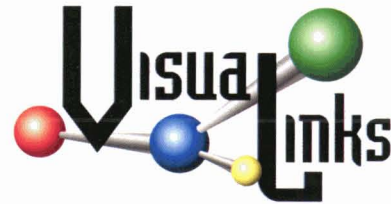




VisualLinks® is a data visualization and pattern discovery tool that can simultaneously connect to disparate relational databases.

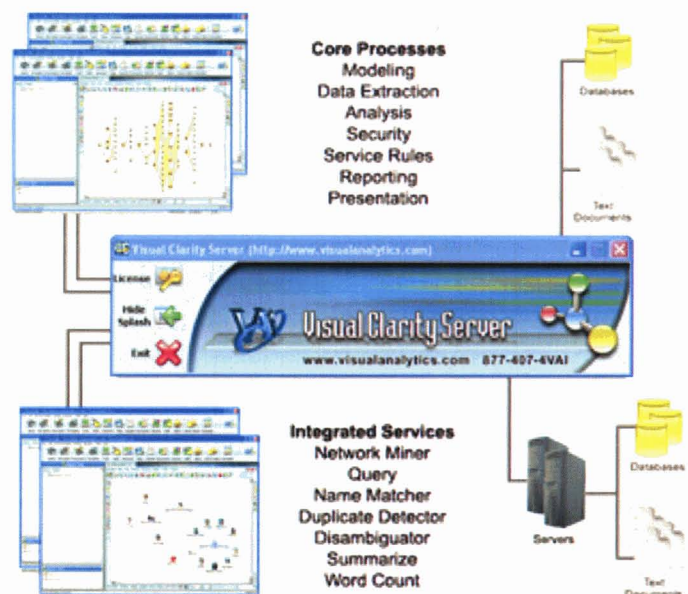
VisualLinks is designed to be scaleable and flexible with low administrative cost. It can connect to any relational schema through a server-side, XML-based data view. The VisualLinks architecture includes three layers – the Client Layer, the Server Layer, and the Data Layer.

- ◆ The Client Layer is the end-user visualization component (the VisualLinks Client). The VisualLinks Client is the user interface responsible for the 3-D visual representation of data relationships and patterns and is the means for data extraction, analysis and output operations. This GUI-based front-end is also used for system administration, data modeling collaboration, network analysis, rule-based operations and many other user operations.
- ◆ The Server Layer (Visual Clarity Server) is responsible for maintaining database connections, maintaining user connections, maintaining security profiles and storing the dynamically-linked service components that represent the business logic of the VisualLinks application. Each of these service components is loaded during the Visual Clarity Server startup process and accessed by users through requests from the VisualLinks Clients.

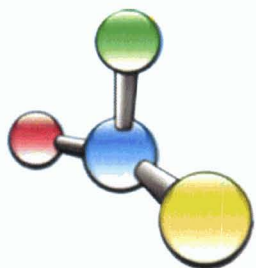
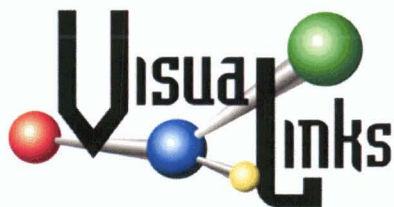


- ◆ The Data Layer refers to the data accessed by the Visual Clarity Server. This layer can be made up of any number of relational databases or even other servers that act as proxies to additional data layers. Access to the Data Layer is tightly controlled by the Visual Clarity Server security settings. Data access is also limited by the data modeling process which defines the values in your database returned to users through VisualLinks Client requests.

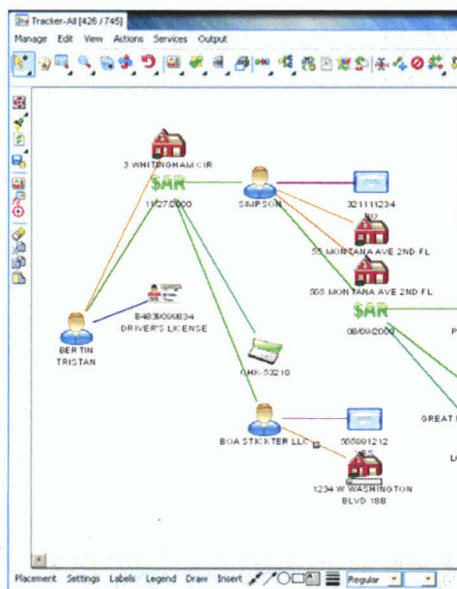
VisualLinks' integrated service components, including the Disambiguator®, Matcher, Summary, and Miner, provide an unparalleled set of capabilities to support pattern detection and advanced data analysis for a variety of applications. To date, VisualLinks has been used with a host of different domains of data, such as network traffic, medical patterns, pharmaceutical research, insurance fraud, bank transactions, drug trafficking, criminal investigations, terrorism, and many more.



VISUALINKS PREVIEW

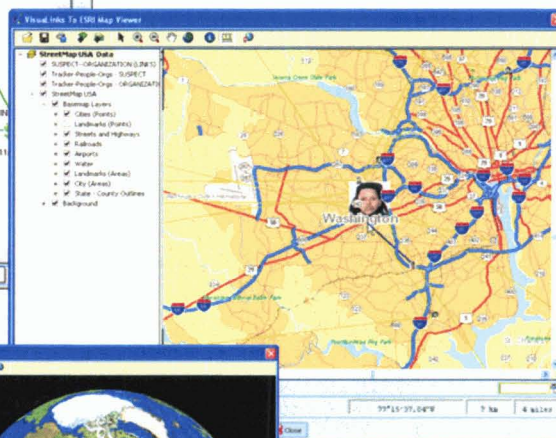


Find all of an object's direct and indirect connections.

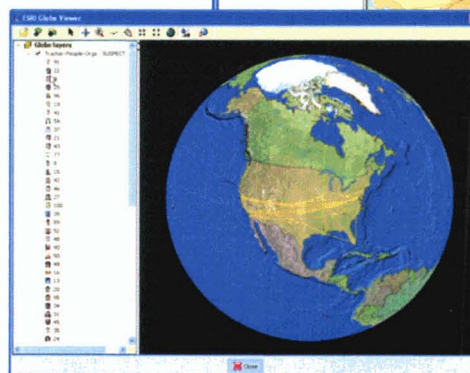
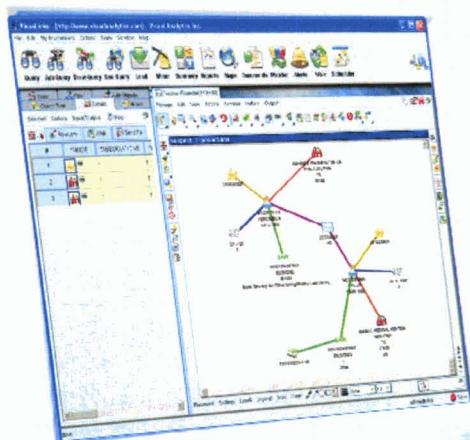


#	NODE	ASSOCIATION	KEY	MODEL	SOURCE	TI
1			81	Tracker AS	john john Track	SUSPE
2			38	Tracker AS	john john Track	ORGAN
3			San DiegoCA02101	Tracker AS	john john Track	ADDRS
4			48	Tracker AS	john john Track	SUSPE
5			37	Tracker AS	john john Track	ORGAN
6			Los AngelesCA0001	Tracker AS	john john Track	ADDRS
7				Tracker AS	john john Track	RESID
8			SUSPECT 48 -> ADDRESS: Los Angeles	Tracker AS	john john Track	RELAT
9			SUSPECT 48 -> ORGANIZATION 37 47	Tracker AS	john john Track	RELAT
10			SUSPECT 41 -> ADDRESS: San DiegoCA	Tracker AS	john john Track	RESID
11			SUSPECT 41 -> ORGANIZATION 38 40	Tracker AS	john john Track	RELAT

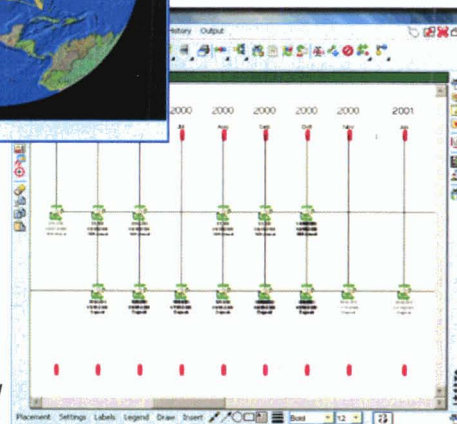
Review the details of all data found during queries.



Display geographic data on a variety of maps.



Plot data along date-based time lines.



VISUALINKS FEATURES



Integration

VisuaLinks® connects directly to your existing data sources including any commercial relational database system and a variety of file types. The Server component resides between your data sources and your users. It handles all access control, query requests and data exchanges between the data sources and users.

Modeling

The VisuaLinks Model Wizard lets you integrate various data sources into a single, consistent, graphical view of all your data. The Modeler defines the various types of data available, how they are connected, and their visual representation. The built-in transformation system, the Disambigitor®, helps to standardize and cleanse the data.

Data Extraction Services

The VisuaLinks services allow users to extract targeted information from your data sources – rather than loading in all available data and filtering down. VisuaLinks services provide a variety of unique search algorithms that can find data based on values, locations, connections and much more. These services provide analysts a clear starting point for analysis, bringing in additional information as required.

Link Analysis and Pattern Discovery

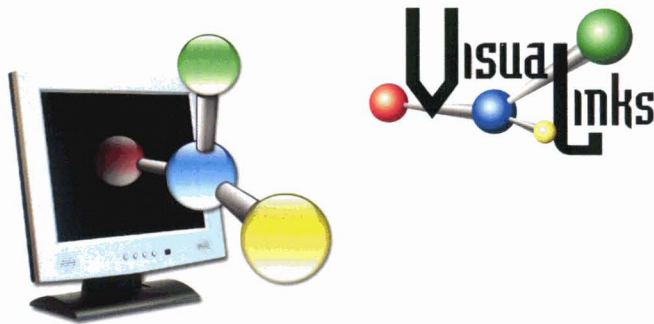
VisuaLinks provides an unparalleled set of analysis tools designed to drill-down into your data, visually exposing and displaying patterns, trends, unknown associations and hidden networks in your data. Data is presented in an illustration, in your data.

Presentation

VisuaLinks includes a wide variety of tools to assist users in creating finished analysis products – from mapping and annotations to export and reporting capabilities.



VISUALINKS PRODUCT DESCRIPTION



VisuLinks® is an advanced, visual data analysis toolkit designed for use in virtually any environment for any analytical need. VisuLinks integrates, standardizes, controls access to, and enables analysis of your operational and organizational information in a visual manner, drawing connections between entities to expose and identify patterns and trends in your data.

VisuLinks presents data graphically – “connecting the dots” by extracting and visually displaying data to uncover patterns, associations, networks, trends and anomalies in data. VisuLinks addresses the entire analytical process – from access and integration to presentation and reporting – providing a single and complete solution to a broad range of data analysis needs.

VisuLinks provides an advanced set of analysis tools that allows you to:

- ◆ Couple directly to existing database systems without moving, transporting or copying data
- ◆ Integrate multiple sources of data to create a comprehensive view of your data

The Analysis Software to...

...Analyze Money Laundering Patterns
...Enhance Counterintelligence Capabilities
...Assist in Combating Terrorism
...Enable Actionable Intelligence
...Expose Financial Crime

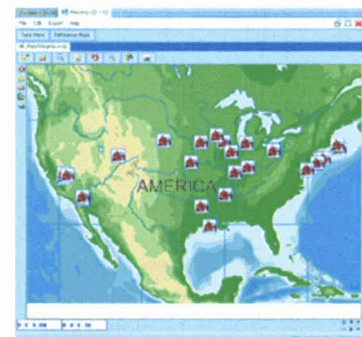
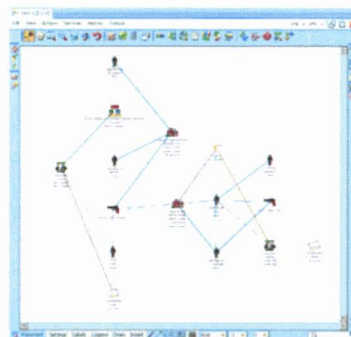
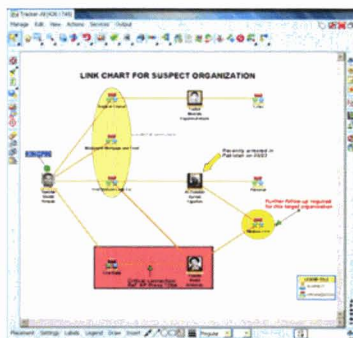
- ◆ Query and display large amounts of data with no size limit
- ◆ Use a number of query algorithms to expose networks, patterns and trends in your data
- ◆ Visually reveal direct and indirect linkages within your data
- ◆ Perform proactive and reactive analysis supporting tactical and strategic operations
- ◆ Provide advanced analytical functions ensuring accurate pattern detection
- ◆ Collaborate with peers, sharing data and related analysis
- ◆ Prepare and print final analysis presentations
- ◆ Save and export data to a variety of formats

VisuLinks is a platform-independent solution that operates in a networked environment using a client / server architecture to allow large numbers of users to analyze and collaborate on any type of information in an endless number of applications.

Please contact our sales team at sales@visualanalytics.com with any questions or other information requests.



Request an online demo at
www.visualanalytics.com



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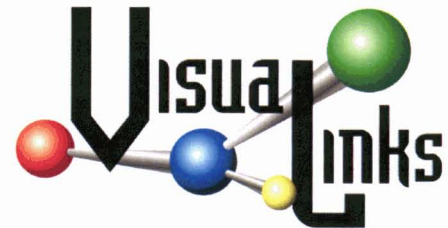
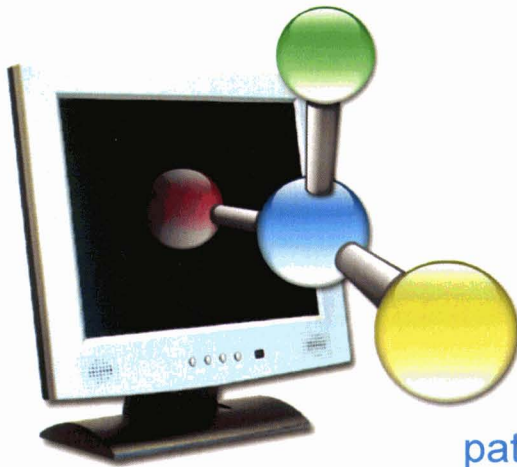
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VISUALINKS PRODUCT DESCRIPTION

Superior Pattern Discovery Solutions

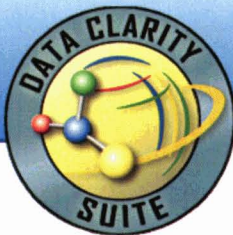
*Discover the **SIMPLICITY** and
POWER of VisuaLinks today!*



An advanced analysis tool built
from the ground up to reveal links and
patterns as you have never seen them before.

See the connections and expose the patterns in your data!

Expand the Possibilities ... with Digital Information Gateway



The Data Clarity® Suite combines the power of the Digital Information Gateway (DIG®) search and retrieval technology with the ground-breaking analysis capabilities of VisuaLinks® to provide the most comprehensive solution for searching, analyzing, sharing and reporting on multiple data sources.

Superior Pattern Discovery Solutions®
...with the Power to Predict and Prevent



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THE PROBLEM: ANALYZING VOLUMES OF DATA

Many organizations have spent years, even decades, gathering volumes and volumes of data to improve processes, increase efficiency, or investigate irregularities or suspicious behaviors. Manually reviewing data – especially data stored in various formats – is a tedious task and one that is prone to oversight and error.

Even with all of this data at their fingertips, most organizations fail to maximize the effectiveness of these analytics.

VISUALINKS: VISUAL ANALYSIS

How does Visualinks solve this challenge?

TECHNOLOGICAL ANALYSIS

Visualinks® is an analytical software solution designed to integrate various data sources to give users a simple, graphical look at the data and the information it contains.

Visualinks was built specifically to address the need for better, faster, more accurate analysis by making data visually readable and applying rules that show relationships between entities by taking rows and columns of data values and turning them into pictures representing different types of entities, e.g., person, address, phone, ID, weapon, vehicle, etc. Visualinks then draws the relationships between these entities based on the values found in the data.

Visualinks includes a comprehensive analytical tool set designed to enable both reactive and proactive analysis, regardless of the analytical purpose. Visualinks can be used in any company, organization or agency to perform any type of analysis – from counterterrorism and narcotics trafficking to waste, fraud and abuse.

PRESENTATION

Visualinks is a turn-key solution, supporting the entire analytical process, from integration and access to presentation and reporting.

Visualinks includes the tools you need to create a finished analysis product, whether you need to generate a formal report or a simple presentation slide.

Visualinks has a built-in reporting system that generates standard reports, in a number of formats, from your analysis. Visualinks is also fully integrated with the Eclipse Business Intelligence & Reporting Tools (BIRT) allowing you to create and generate custom reports specific to your analytical needs.

Additionally, Visualinks includes features that let you create a visual presentation of your analysis, such as drawing, labeling, legend and image import features. These features are designed to give users the ability to call out specific items of interest or simply create a stylish presentation of the data.



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50 Citizens Way, Suite 202, Frederick, MD 21701

Office: 240-215-6600 Toll Free 1-877-407-VAI (4824)

<http://www.visualanalytics.com>

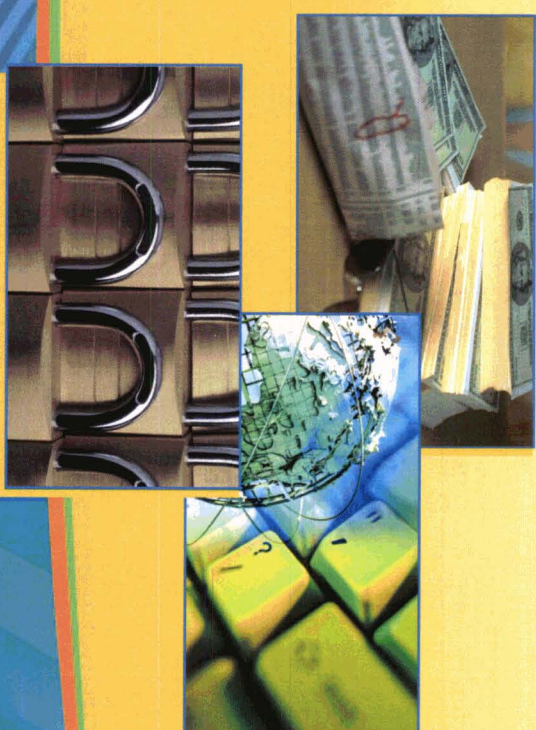
sales@visualanalytics.com

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VISUAL ANALYTICS INC.

Visualinks Overview



Superior Pattern Discovery Solutions...
...for every organization

INTEGRATION

VisuaLinks connects directly to your existing data sources, including any commercial relational database system and a variety of file types. VisuaLinks comes pre-configured to connect to several popular database systems and supports connections to virtually any commercially available database system.

VisuaLinks includes a powerful modeling system that helps you pull together data from different sources and create a single, consistent representation of the data for your uses. The modeling system provides a number of options that let you integrate your data, including the Disambiguator®, another powerful feature of VisuaLinks, designed to apply transformations to data values. The Disambiguator offers a multitude of built in functions and supports custom-built functions. Functions range from simple case conversions and data type conversions to value validation and entity extraction.

The modeling system gives you a great deal of flexibility in designing the data representation, including images used to represent entity types, relationship line types and colors, data labels, banners, and legends to name just a few.

SEARCH AND RETRIEVAL

The VisualLinks Services are data extraction routines that let users point and click to create a search while VisualLinks automatically generates highly-complex SQL queries to return the information to the user. These Services are generally the starting point for any analysis.

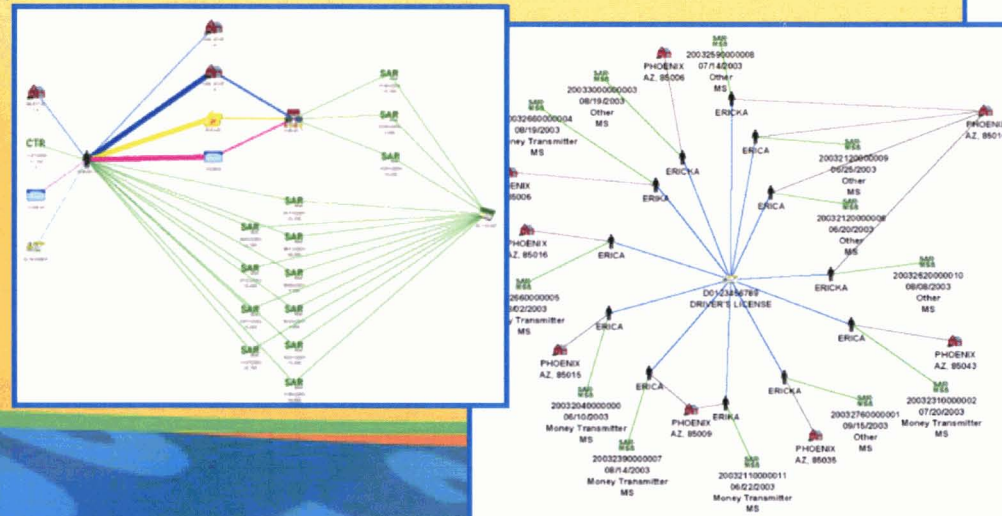
Even the most powerful of the VisualLinks Services is point-and-click driven. Each service is designed to hide and minimize the complexities of working with databases to the end user.

PATTERN DISCOVERY

VisualLinks is, at the core, a link analysis and pattern discovery technology. Its purpose is to uncover and expose patterns, trends and anomalies in data.

VisuaLinks includes a diverse set of tools that lay out different types of data to help analysts visually identify and recognize patterns in data, including grouping, association weighting, social network analysis, and temporal layouts. While not all layouts work well for all types of data, the variety of layout techniques available in VisuaLinks can assist analysts in any data domain in uncovering previously unknown or unseen patterns.

VisualLinks helps analysts sift through volumes of data to find targets of interest using filtering, drill-down and link analysis tools. VisualLinks can zero in on, or isolate, specific targets in the data, and then, step-by-step, build relationships that show patterns of activities or behaviors. Applying a combination of these tools and techniques enables analysts to perform reactive and proactive (strategic and tactical) analysis in a fraction of the time a manual analysis would take.



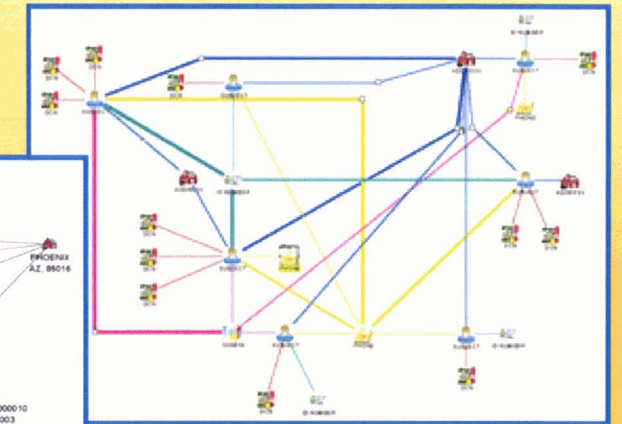
COLLABORATION

VisuaLinks was developed with the concepts of information sharing and collaboration in mind. Knowing that collaboration between groups, divisions, organizations and agencies is the single best way to ensure that information is current and accurate, Visual Analytics built VisuaLinks as an analytical environment scalable and flexible enough to enable inter- and intra-organizational collaboration.

With its Server-to-Server capabilities, data and analysis storage/distribution features and real-time collaboration tools, VisuaLinks is specifically designed to not only support, but encourage, analytical teamwork.

A PICTURE IS WORTH

Below are some sample results of VisuaLinks' data visualization and analysis.



DIGITAL INFORMATION GATEWAY PRODUCT DESCRIPTION

Superior Pattern Discovery Solutions



***Experience the Most Powerful and Easy to Use
DATA SHARING Solution Available!***

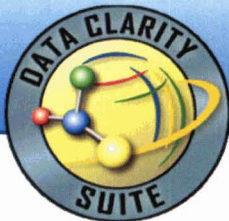


Digital 
INFORMATION
GATEWAY

Create a secure and selective
information sharing network *without*
data conversions or security concerns.

***Search any amount of data with one simple search
in fractions of a second!***

Expand the Possibilities ... with VisuaLinks



The Data Clarity® Suite combines the power of the VisuaLinks® analysis and pattern discovery technology with the unparalleled search and retrieval capabilities of Digital Information Gateway (DIG®) to provide the most comprehensive solution available for searching, analyzing, sharing and reporting on multiple data sources.

***Superior Pattern Discovery Solutions®
...with the Power to Predict and Prevent***



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DIGITAL INFORMATION GATEWAY PRODUCT DESCRIPTION



Digital Information Gateway (DIG®) is the industry's best solution for Federated Search and Information Sharing in Law Enforcement. DIG can securely connect information among any number of organizations and handles an extensive number of databases, intranet content, web sites, office documents, and other types of files.

The DIG Virtual Data Warehouse creates a single point of access to all of your information resources – databases, e-mail archives, web sites, office documents and virtually any other type of electronic file. The DIG Virtual Data Warehouse provides integrated security controls allowing you to set access limits to protect sensitive data. Users can search any and all data available with a single click.

The DIG Virtual Data Warehouse Server-to-Server capability creates a secure and selective information sharing network enabling organizations to share data with other organizations. Data security and integrity are never compromised as data is never moved or copied and control over the data remains entirely with the original owner.

DIG Symphony manages key data processing operations providing integrated data quality, standardization, integration, parsing, enhancing, correcting, merging, matching, purging and general cleansing functionality.

The Advanced Information Sharing and Retrieval Software to...

- ...Investigate Offenses and Critical Incidents
- ...Expose and Attack Conspiracies
- ...Uncover Organized Crime Rings
- ...Examine Phone Tolls for Networks
- ...Identify Gang, Group and Cell Activity

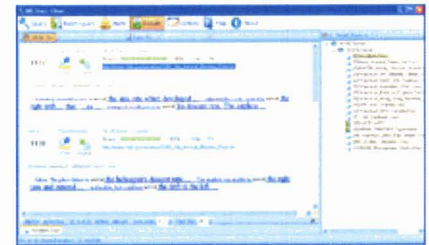
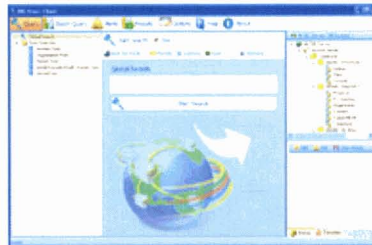
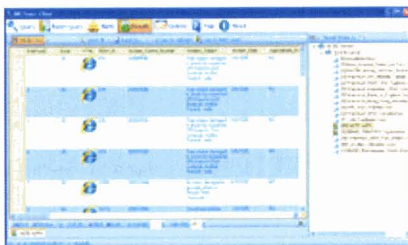
The DIG Symphony Designer enables visualization of data quality programs through a point-and-click designer that builds on-the-fly transformations and generates results for review prior to deployment. Use the DIG Symphony Designer to build any number of transformations to fully integrate your data sources and provide a single, consistent view of all of your data.

The DIG suite of tools provides your organization with:

- ◆ A single, integrated solution to managing data availability and access
- ◆ A single search and retrieval interface to all of your data resources
- ◆ Full control over data access permissions at the user level
- ◆ The ability to create common, searchable data types across multiple, disparate databases
- ◆ Complete data cleansing and transformation functionality
- ◆ Full, customizable event and transaction audit logging

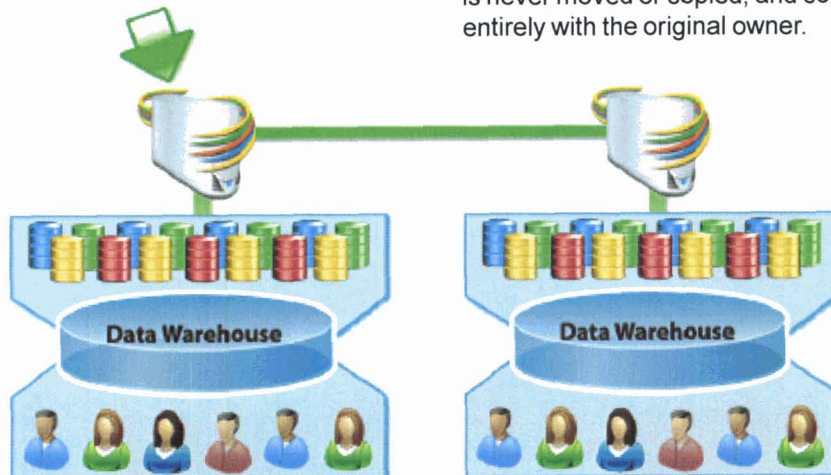
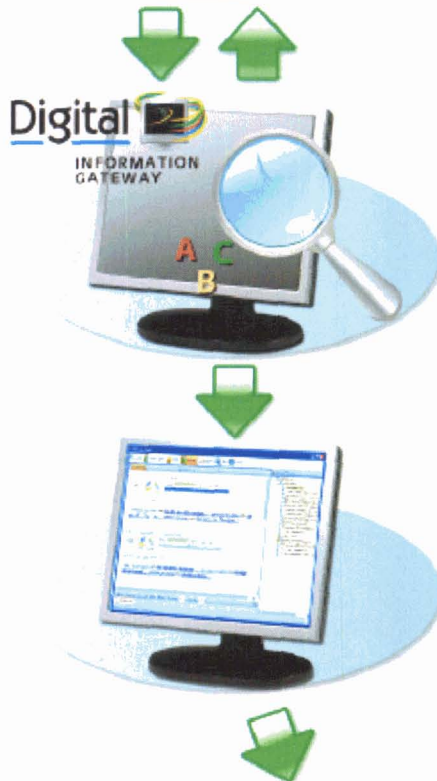
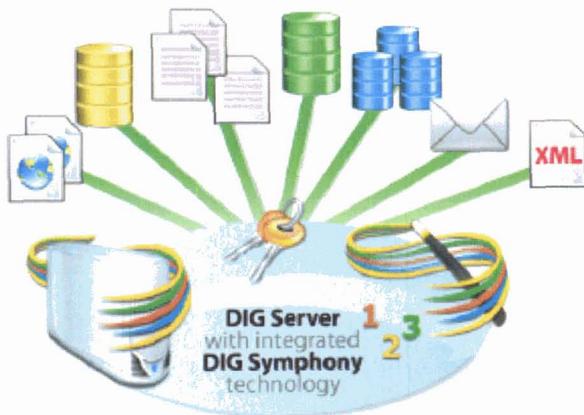


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DIGITAL INFORMATION GATEWAY FEATURES



Integration

Digital Information Gateway (DIG®) connects directly to your existing data sources, including any commercial relational database system, e-mail archives, web sites, and over 60 types of files. The DIG Server resides between your data sources and your users. It handles all access control, query requests and data exchanges between the data sources and users.

Transformations

The integrated DIG Symphony technology is a critical part of data integration. Symphony provides a wide variety of data cleansing and standardization tools that help to create a single, consistent view of your data – regardless of the type of database system from which it was retrieved.

Search and Retrieval

DIG can search specific data sources, all data sources available, and even data sources shared by other agencies or organizations – all at once, in fractions of a second. DIG search results can be reviewed and exported to a variety of formats.

Notifications

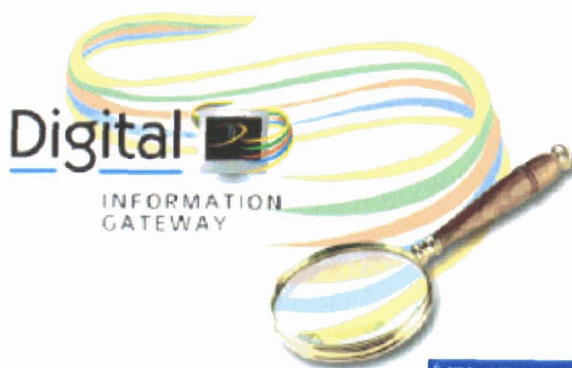
DIG Alerts let users define criteria they want to monitor for in your data sources. Whenever data matching the criteria is added to a monitored data source, DIG sends an automated notification to one or more users.

Virtual Data Warehousing

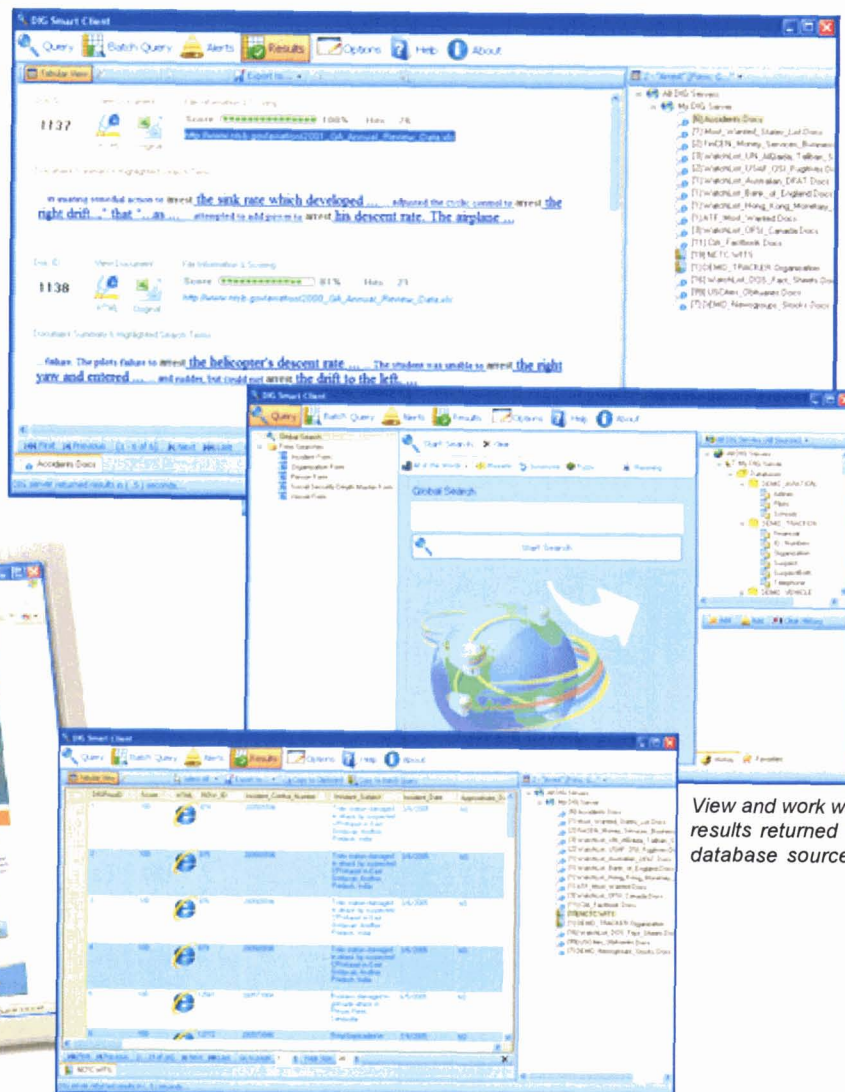
The DIG Server-to-Server capability creates a secure and selective information sharing network – without the costs and security issues surrounding traditional data warehouses. Data is never moved or copied, and control over the data remains entirely with the original owner.



DIGITAL INFORMATION GATEWAY PREVIEW



DIG searches all of your sources for matching documents, web sites, and database records.

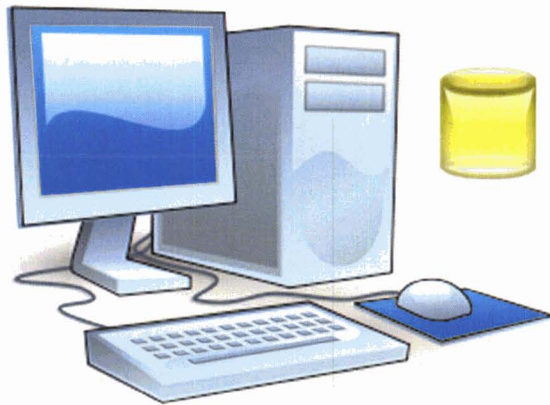


View and work with results returned from database sources.

Review text results with hit scoring and original document viewing capabilities.



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DIG employs a scaleable flexible architecture coupled with low administrative cost.

Digital Information Gateway (DIG®) is a data retrieval and manipulation tool that searches multiple information repositories – including any combination of databases, web sites, e-mails and user documents – simultaneously.

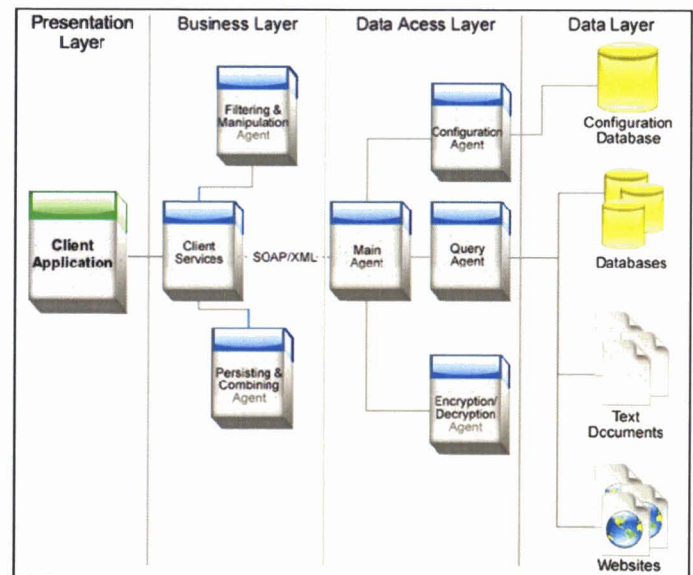
DIG employs a scaleable flexible architecture coupled with low administrative cost. DIG requires no customization to connect to most data sources and uses standards-compliant ODBC or native drivers.

The DIG architecture is broken into four distinct parts – the Presentation Layer, the Business Layer, the Data Access Layer, and the Data Layer.

- ◆ The Presentation Layer is the DIG User software. This software is the user interface where all user interaction takes place. This software assists users in building and executing searches, communicates with the Business Layer to request and retrieve information, and presents search results to the user for further analysis and data manipulation.
- ◆ The Business Layer consists of multiple services responsible for coordinating and handling requests from the Presentation Layer. These services include, but are not limited to, data filtering and manipulation, persistence, grouping and output. This layer handles all requests and returns from the Data Access Layer as well as the core business logic.
- ◆ The Data Access Layer is made up of several stateless services that are responsible for carrying out the requests of the Business Layer. Connections to all information repositories are handled at this layer.
- ◆ The Data Layer consists of information repositories. This can be any combination of databases, user documents, and/or web sites.

All communication in DIG is performed using XML and SOAP. SOAP allows DIG to communicate in the same fashion that a web browser communicates with a web server. This enables DIG to traverse firewalls via simple HTTP requests with no modifications to firewalls that already allow HTTP requests.

DIG, like other Visual Analytics products, is built on open-architectures and standards, like XML, making it easy to adapt, extend or enhance to meet the specific needs of virtually any application.



DIGITAL INFORMATION GATEWAY SYSTEM REQUIREMENTS

The DIG Server software must be installed on a server machine.

Operating System	Windows 2000 Server Windows 2003 Server Windows 2008 Server
Processor	Dual Pentium 4 Xeon 2 GHz or higher
Memory	4 GB RAM (minimum) 32 GB RAM (recommended)
Hard Drive Space	175 MB for software installation Additional space for indexes (total of 15 GB available recommended)
Software	Internet Information Services (IIS) installed and started automatically .NET Framework 2.0 (automatically installed with the DIG Server) ASP.NET SQL Server 2000 or SQL Server 2005 or SQL Server 2008

The DIG Client is launched from a web browser.

	DIG Smart Client
Operating System	Windows 98, 2 nd Edition Windows NT Windows 2000 Windows XP Windows Vista
Processor	Pentium III/800 MHz (minimum) Pentium 4/I GHz or higher (recommended)
Memory	256 RAM (minimum) 1 GB RAM (recommended)
Software	.NET Framework 2.0 Internet Explorer 6.0.1 or higher

SOAP

Digital Information Gateway (DIG®) supports the Simple Object Access Protocol (SOAP) providing a built-in solution to the issues surrounding communication over firewalls. SOAP support is included with the standard DIG installation.

508 Compliance

Visual Analytics strives to be in compliance with section 508 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794d). The Visual Analytics web site provides details on our 508 compliance for all of our products.

Add value to your existing data suite using the VAI Data Center source data. When querying or analyzing your own local information; why not check important referential data simultaneously?

Our Data Center is powered by DIG servers and enables you to reference many valuable sources of information in context with your own. Content is hosted, maintained, and updated by the VAI team to help ensure that you have access to the most relevant information.

Additionally, we continue to form key industry partnerships to bring the most valuable sources of information to your Federated Search and Analytical environment.



THE PROBLEM: SEARCHING AND SHARING DATA

Searching for, and securely sharing, your data, in multiple formats, across platforms and between organizations and business partners, is a difficult proposition. Data sharing has become a high-priority in many market sectors, but there are numerous practical challenges to delivering on this difficult challenge: disparate database systems with differing schemas, structured (tabular database information) versus unstructured data (Microsoft Word documents, PDF files, web pages, etc.), varying security requirements, and performance and cost considerations.

Visual Analytics' Digital Information Gateway (DIG) solves this problem. DIG provides the means by which you can search and share your data, regardless of structure, location or format, within your organization, or outside your organization, securely, efficiently and cost-effectively.

DIG: SEARCHING AND SHARING DATA SOLVED

How does DIG solve this challenge?

HOMOGENIZED DATA

DIG provides a layer of "abstraction" for each data source under its control, "mapping" a standard schema to the columns of each shared source. When a user receives query results, all columns returned adhere to this schema, regardless of the name given to any column in the source database. Differences between sources are hidden from the end-user, giving the end-user the illusion of querying a single, vast, database.

HIGH DATA VOLUMES

DIG promotes a higher degree of data consumption when compared with standard web sites or Portals. This is due to the automation, and multi-faceted nature, of the federated search. Giving users access to more of your data as well as the data of other agencies, can boost the value of your data to that user.

INSTANT SOA

What's Instant SOA? It's the instant transformation of your data into a **S**ervices **O**riented **A**rchitecture that can be leveraged by anyone with access to the DIG network. DIG exposes shared data sources as Web Services, allowing any web service client to access the shared data. The DIG SOA framework provides a robust set of Web Service APIs that enable existing client applications to easily use your data.

DIG is designed to access any type of data, and provides a ready-made set of web services that are generic and that put you in control. This is made possible by a modeling framework that allows each data source to be mapped to the standard schema. Once your data is controlled by a DIG server, that data can be exposed as a web service – without any additional programming.



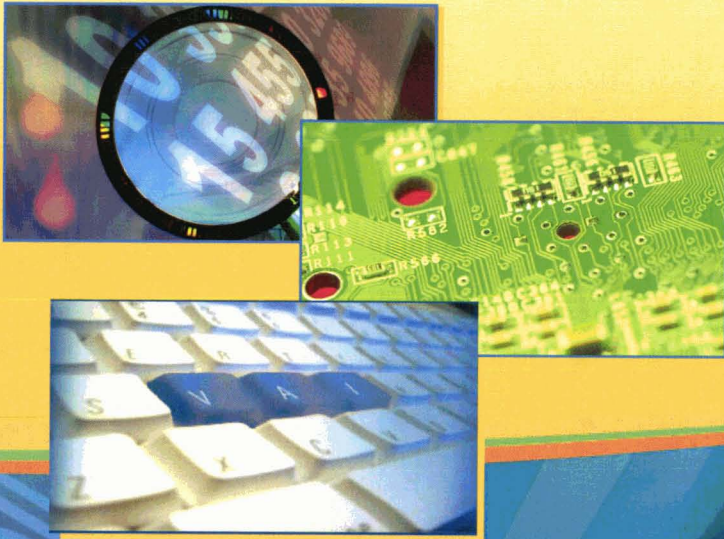
VISUAL ANALYTICS INC.

50 Citizens Way, Suite 202, Frederick, MD 21701
Office: 240-215-6600 Toll Free 1-877-407-VAI (4824)
<http://www.visualanalytics.com>
sales@visualanalytics.com

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VISUAL ANALYTICS INC. DIG Overview



Superior Pattern Discovery Solutions...
...for every organization

FEDERATED SEARCHING

DIG uses a distributed, clustered network approach to executing searches. Multiple DIG servers distribute and respond to queries, thus distributing workloads across servers, improving query response time for the end-user.

This same approach allows secure "outbound" sharing of data between departments and to business partners. Any location wishing to share data may install a DIG server that manages the sharing activity. The data managed by each DIG server can be shared, or restricted from sharing, as dictated by local policy or as required by service agreements. Share a little, or share a lot, or only share yes/no notifications of matches - all of this is configured through a graphical user interface.

SIMPLE TO QUERY

The user interface for the DIG query client is simple to use. The interface resembles any number of Internet search engines making it immediately understandable to the average end user. DIG also supports a simple query language for advanced users.

WORD-LEVEL INDEXING

All the data managed by DIG can be word-level indexed to speed performance. When a user queries for "John Smith," this query is federated across participating DIG servers, and is searched for in every column indexed by DIG. This allows a user to find references to "John Smith" in dedicated columns (like First_Name or Last_Name columns), in a "Notes" or "Comment" column, as well as in unstructured data.

Because the queries are federated, and because word-level indexing happens for all columns in all shared sources, a phrase like "John Smith" can even be found in a source where no dedicated name fields exist.

SINGLE POINT OF QUERY

All of the data in a DIG network is automatically available from a single query user interface. When a user enters a query, the query is distributed across the DIG network, executing against both structured and unstructured sources.

SECURE SHARING

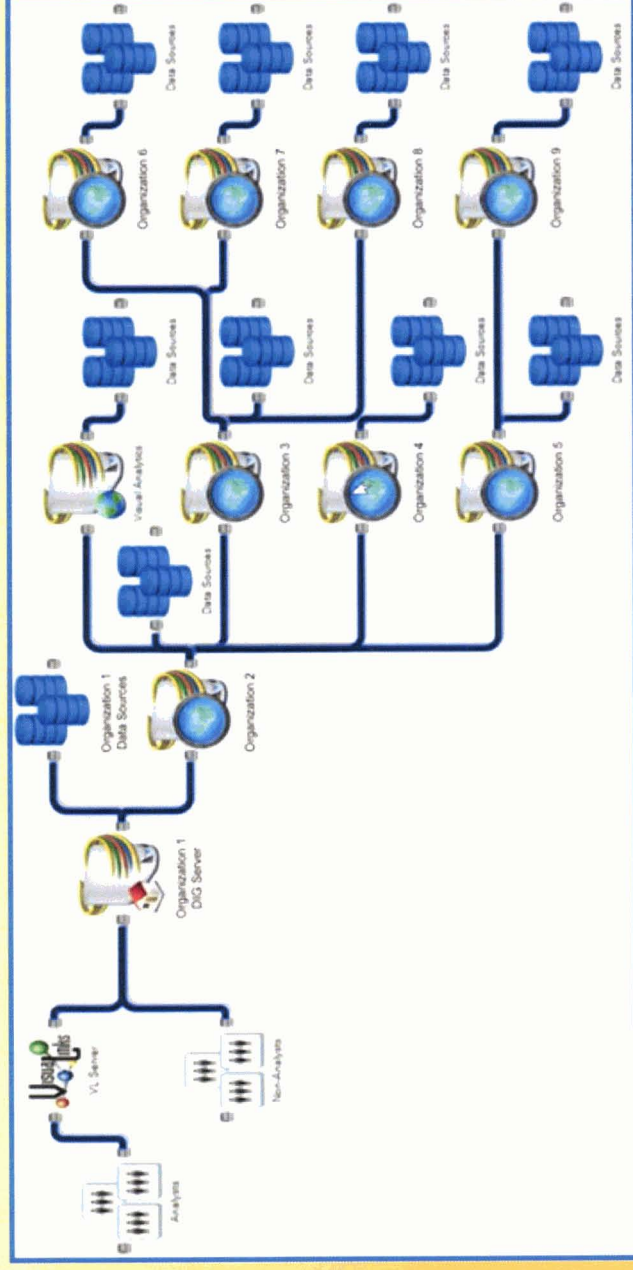
All access to data is controlled at each DIG server and the data streams between servers are encrypted. Any column of a database can be shared, or not. DIG provides for both user-level and group-level access at the data source, table or column level. DIG also enables application-specific, row-level security to be applied through an open, plug-in framework.

VIRTUAL DATA WAREHOUSE AT YOUR FINGERTIPS

In essence, DIG provides a "virtual" data warehouse, without the expense and work of creating a traditional, "real," data warehouse. DIG consolidates your data, without the need to physically move the data from the source to a warehouse. This approach also reduces the latency issues normally associated with traditional data warehousing, in that a recurring ETL (Extract, Transfer and Load) process must be applied to the original source data to introduce it into the warehouse.

A PICTURE IS WORTH

Below is a graphic displaying a common approach to configuring a DIG network.



VAI Data Center

Access to vital data – formatted for you and ready to use!

The VAI Data Center uses DIG technology to make content available in a convenient and standardized format that supports real-time queries. We make it easy to find the data you are looking for using DIG's built-in capabilities for Full-Text Searching, Batch Queries, and Alerting on new content that matches what you're looking for.

The following methods of access are supported:

DIG Server to Server

A "data layer" connection from your DIG Server(s) to our DIG Servers at the VAI Data Center.

VisuaLinks to DIG Server

Have a VisuaLinks Server, but not a DIG Server? Connect to our Data Center using the VisuaLinks to DIG Connector.

DIG Smart Client

Go directly to our Data Center web site and use the DIG Smart Client to query any sources available to your account.

Web Services API

Connect your custom application, web site, portal, or commercial software directly to any data sources available to your account. *Source code (C#) and documentation are available.

Visual Analytics offers our Data Center sources in a variety of packages to suit your organization's needs. Contact our sales team for more details.

Email: sales@visualanalytics.com
Phone: 1-877-407-4VAI (4824)

Purchase Information

VAI offers Tiered pricing based on the number of queries performed each month.

Tier	Monthly Queries	Monthly Subscription	Cost per Query
1	1,000*	\$ 500	\$ 0.50
2	5,000*	\$ 1,000	\$ 0.20
3	10,000*	\$ 1,500	\$ 0.15
4	50,000*	\$ 2,000	\$ 0.04
5	100,000*	\$ 3,000	\$ 0.03
6	100,000 +	Call for quote	-

**VAI offers a 10% grace on monthly query volume. Queries in excess of the grace amount will be billed at the Cost per Query for that Tier.*

All Packages require an annual commitment with either quarterly or annual billing. Any overage adjustments are billed on next billing cycle.

VAI provides discounts for Multiple Packages.

# of Packages	Discount
1	-
2	10%
3	15%
4	20%
5 +	30%

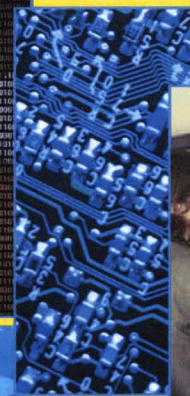
VISUAL ANALYTICS INC.

50 Citizens Way, Suite 202
Frederick, MD 21701
240-215-6600 • 1-877-407-4824
<http://www.visualanalytics.com>
sales@visualanalytics.com
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VISUAL ANALYTICS Data Center

Mission-Critical Data, At Your Fingertips
fast, secure, convenient, standardized



Superior Pattern Discovery Solutions...
...for every organization

U.S. Sex Offenders Package



The U.S. Sex Offenders Package provides access to over 500,000 sex offender records in all 50 states. Details include First and Last Name, Photo / Mug Shot, Aliases, Addresses, Charge Information, Level of Offense, Links to Online Maps, and is fully Geo-Coded with Latitude / Longitude.

This data is updated **daily** and provides fast, unified access to this important resource. Interested parties may include: Law Enforcement, Schools, Employers, Landlords, and Neighborhood Watch groups.

Provided in partnership with Family Watchdog® (www.familywatchdog.us).

JusticeXChange Package



The JusticeXChange Package includes information about incarcerated individuals throughout the United States. Details include Custody Status, Offender Home Address and Phone, Offender Release / Transfer / Escape Status, and Photo / Mug Shot.

Access to this information enables quick location of offenders, monitoring of probationers and parolees, and tracking down dead-beat parents.

This data is updated **daily** and provides invaluable, unified access for Law Enforcement.

Provided in partnership with Appriss® (www.appriss.com).

**This package is priced using the Appriss model. VAI pricing models do not apply.*

RiskAnalyzer Package



The RiskAnalyzer Package combines several High-Risk Watch Lists, including the Nomino Data RiskFeed™ products, into one point of access. This package will help your organization identify key individuals and groups that are targeted by the U.S. Government for Bank, Fraud, or Terrorism reasons. Knowing that you are dealing with such people is key to making the right decision in any situation (employment, arrest, doing business with, positions of trust, etc.).

Data sources include: OFAC, FBI, HMT, OSFI, Interpol, FATF, EU, WB, UN, BIS, and DTC.

This data is updated **weekly** and provides a key reference point to help combat risk in almost any industry.

Provided in partnership with NominoData™ (www.nominodata.com).

Social Security Death Master Index (SSDI) Package



The SSDI Package provides access to approximately 82 million records on deceased individuals. Details include Social Security Number, First and Last Name, Birth Date, and Death Date.

This data is updated **monthly** and adds a crucial check to combating fraud in many areas. Activities may include: Law Enforcement, Employment Screening, and Anti-Money Laundering Compliance.

MethCheck Package



The MethCheck Package contains Pseudoephedrine registered sales data from major pharmacies around the United States. These sales are legally controlled and logged since retail Pseudoephedrine is a primary ingredient used by thousands of illicit Methamphetamine Labs.

Access to this data lets you track individuals seeking to circumvent the legal buying limits by "smurfing" from store to store. Individuals use this technique to accumulate an illegal amount of cold medicines, often used to create variations of "meth."

This data is updated **every few minutes** and provides invaluable, unified access for Law Enforcement.

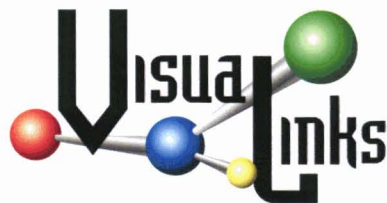
Provided in partnership with Appriss® (www.appriss.com).

**This package is priced using the Appriss model. VAI pricing models do not apply.*

The Data Center <small>powered by CIG</small>	
4 User Methods of Access	Datasource Packages
Local Server	MethCheck™
DIG® Smart Client	JusticeXChange
VisualLinks®	U.S. Sex Offender
Web Services API <small>.Net or Java (JDBC Drivers)</small>	Social Security Death Index
	RiskAnalyzer

Superior Pattern Discovery Solutions

The Data Clarity environment allows users to search all database servers, documents, web pages...



The Data Clarity Suite combines the power of VisuaLinks® and Digital Information Gateway (DIG®) into an unmatched analytical environment.

The Data Clarity environment provides the unparalleled power to discover patterns across all pertinent data, structured and unstructured, using our seamlessly interconnected Data Clarity Network. This network forms a virtual data warehouse without the cost and, more importantly, without the issues surrounding data ownership – data stays at the owner's location and the owner controls data access.

Users of any of the validated Data Clarity sites can then search and mine all the information available within the Data Clarity Network of servers. This allows users of the environment to perform any operation across local and remote data of all data formats.

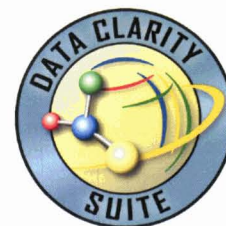
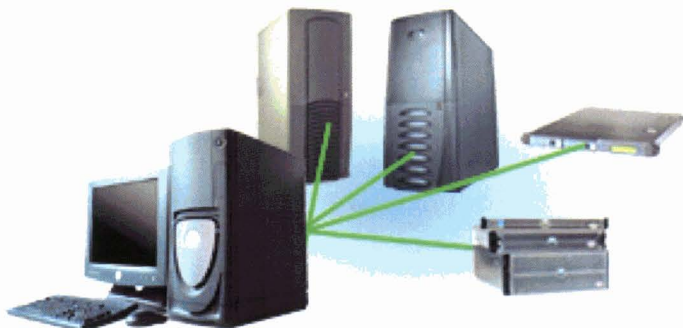
The Data Clarity environment allows users to search all database servers, documents, web pages, and e-mail servers to perform data mining techniques, clustering, timeline analysis, social network analysis, entity extraction and classification, ad hoc reporting, and data sharing across many disparate organizations.

Data Clarity is the most affordable and robust information sharing and pattern discovery solution available.

Please contact our sales team for more information at 1-877-407-4VAI (4824) or email us at sales@visualanalytics.com about the benefits of the Data Clarity Suite.

Pattern Discovery and Information Sharing Software





The Power of Information Sharing Through Collaborative Analytics

The Data Clarity Suite takes advantage of the unique **Server-to-Server (S2S)** technology developed by Visual Analytics. The S2S technology seamlessly connects local and remote data sources into a network of distributed databases and users across different agencies/ organizations.

The network forms what some people would consider the ultimate virtual data warehouse. Unlike traditional data warehouses which are cumbersome, complex, and expensive to implement, the S2S approach enables each owner of data in the network to maintain control and security of the data while allowing access to the data. This approach removes all cost and security concerns as data is never copied or moved from its original location and each owner maintains full control over access. Furthermore, since the data access logs are recorded locally for each site or data source, the owners have full disclosure over how their data is being utilized.

Each location in the network runs its own DIG Server creating maps and views of data that the consumers of the network will be able to access. This innovative approach to data sharing ensures that:

- ◆ Data is always up to date (never copied or duplicated)
- ◆ There are no ownership issues (owners of the data maintain their ownership)
- ◆ Security, data access, and data purity is maintained by the original owners of the data (no changes can be made by outside users)
- ◆ There is no costly translation, fixed schema, or data transport (as would be required by a data warehouse or other approaches)

Adding new data to a S2S network can literally take a matter of hours or even minutes - it is a simple process of deciding what data should be made available within the network and who will be granted access.

Our S2S technology is the single best approach to finding criminals utilizing data across multiple data sources or multiple agencies and can be used inter-state or on a national basis in a relatively short time frame. With the S2S approach, the network data is always live and up-to-date, whenever any source of information in the network is updated, all end-users with the appropriate permissions can find and utilize the information in a timely manner.

*Security, data access, and data purity
is maintained by the original owners of the data*



Today's terrorism also threatens our economic and information resources. Our vulnerability to terrorist attacks expands with our growing reliance on information technologies. Increased access to information and the centralization of vital components of local, national, and global infrastructure threaten both local and national security.

VisualLinks® and Digital Information Gateway (DIG®) are specifically designed to retrieve information from varied formats and sources to expose hidden activity and behavioral patterns.

- ◆ **Identify Relationships** – uncover interactions and relationships between terrorist groups and their members.
- ◆ **Link Group Members** – understand formal and informal organizational structures.
- ◆ **Connect Networks** – expose connections between group members, outside individuals, other organizations, locations, facilities and communication networks.
- ◆ **Expose Group Operations** – show shared assets, materials and supplies used to carry out terrorist missions.
- ◆ **Track Technologies** – track different types of technologies used as components for manufacturing terrorist weapons.
- ◆ **Understand Behaviors** – track and analyze group behaviors for early detection of potential threats.
- ◆ **Assess Vulnerabilities** – evaluate funding resources, recruiting methods, communication networks, storage facilities and other resources to uncover potential vulnerabilities.

"Actionable intelligence is essential for preventing acts of terrorism. The timely and thorough analysis and dissemination of information about terrorists and their activities will improve the government's ability to disrupt and prevent terrorist acts and to provide useful warning to the private sector and our population."

– President George W. Bush
as quoted in “*The Department of Homeland Security*”
from www.whitehouse.org



Border Security

Protection of our national borders is a critical task in our national defense plan.

The United States shares 5,525 miles of border with Canada and 1,989 miles of border with Mexico. The U.S. maritime border includes 95,000 miles of shoreline, and a 3.4 million square mile exclusive economic zone. Every year, more than 500 million people cross our borders to enter the United States. Some 330 million of these people are non-citizens.

Securing the borders requires the cooperation of several federal agencies – including those responsible for transportation security, immigration control, border patrol, customs, and maritime security – in support of the overall goal of providing Homeland Security.

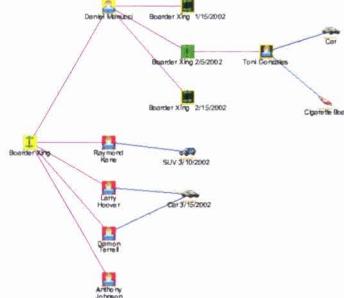
The ability to research and share information among and between these agencies is mission-critical.

The Visual Analytics Solution

VisuaLinks® and Digital Information Gateway (DIG®) are ideal tools for searching through a wide range of data sources to extract, analyze and visually expose patterns of activity.

The Visual Analytics solution allows you to:

- ◆ **Share Information** – give every agent the ability to retrieve information from any and every data source available with a single search.
- ◆ **Visualize Mass Data** – expose patterns by reviewing and analyzing thousand of records.
- ◆ **Summarize** – quickly produce frequency counts and statistical information.
- ◆ **Track and Correlate** – compare data values such as names, IDs and addresses to track and identify individuals.
- ◆ **Identify Routes** – use geographic data to pinpoint and plot entrance routes.



Narcotics Trafficking

Law enforcement initiatives attempt to attack drug trafficking organizations at every level through a careful coordination of local, state and federal efforts.

Law enforcement officials must constantly adapt to new situations, make greater use of intelligence, stay current with technology, and expand cooperation between agencies to be effective in their drug control efforts.

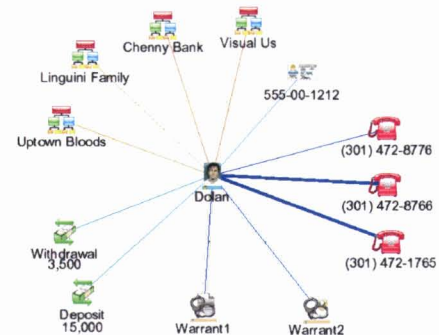
All levels of law enforcement must employ operational (reactive) and strategic (proactive) analysis methods that focus on both short-term and long-term goals. In order to effectively perform both types of analysis, law enforcement agents must be able to access a wide range of information to uncover hidden links between cases which would normally seem unrelated.

The Visual Analytics Solution

VisuaLinks® and Digital Information Gateway (DIG®) are specifically designed to retrieve information from varied formats and sources to expose hidden activity and behavioral patterns.

The Visual Analytics solution allows you to:

- ◆ **Share Information** – give every agent the ability to retrieve information from any and every data source available.
- ◆ **Identify Relationships** – uncover interactions and relationships between perpetrators and organizations.
- ◆ **Visualize Mass Data** – expose patterns reviewing and analyzing huge amounts of data, with no size limit.
- ◆ **Discover Patterns** – quickly plot and analyze geographic and chorological data.
- ◆ **Summarize** – quickly produce frequency counts and statistical information.
- ◆ **Track and Correlate** – compare data values such as names, IDs and addresses to track and identify individuals.



The Common Criminal

Vandalism – personal property theft – domestic violence – credit card fraud – firearms violations – money laundering – burglary – violent crime – environmental crime – cyber crime – identity theft. These are but a few of the illicit activities encountered by local, state and federal law enforcement communities every day.

How many of these crimes can be linked to individuals acting as agents of criminal organizations? Even vehicle theft is widely believed to be a form of organized crime generating billions of dollars in revenues each year.

Among the many challenges in solving all types of crime is sifting through the vast amounts of information collected and stored in a wide variety of formats in a wide variety of systems throughout the country, and in fact, the world.

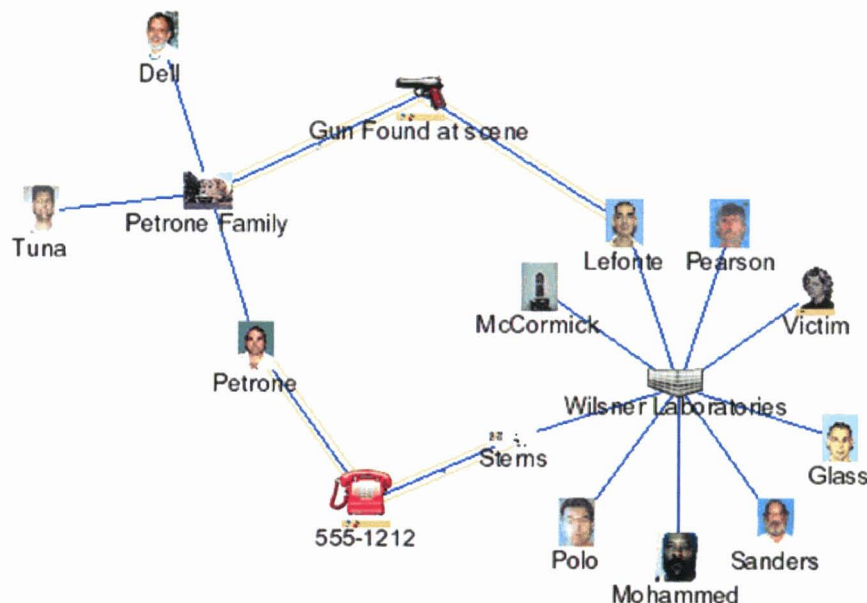
The ability to access and analyze the right information at the right time is an indispensable factor in identifying and finding the perpetrators. Data mining is a powerful approach that supports crime analysis, crime mapping, and criminal intelligence.

The Visual Analytics Solution

VisuaLinks® and Digital Information Gateway (DIG®) are ideal tools for searching through vast amounts of data to extract, analyze and visually expose patterns of activity.

The Visual Analytics solution allows you to:

- ◆ **Access Data** – search any and every data source available with a single search.
- ◆ **Visualize Mass Data** – work with thousands of data records with no size limitations.
- ◆ **Identify Relationships** – expose interactions and relationships between all types of data, including suspects, organizations, ID numbers, vehicles, etc.
- ◆ **Find Networks** – visually display and analyze clusters of related data.
- ◆ **Summarize Data** – produce statistical information on the fly.
- ◆ **Track and Correlate** – compare data values, such as names, using Soundex and other matching algorithms.
- ◆ **Share Data** – rapidly respond to inter-agency data requests.



Expose Group Operations – show shared assets, materials and supplies used to carry out terrorist missions.



Money Laundering & Financial Crimes

Criminals launder money to hide criminal activity – everything from drug trafficking to tax evasion – that generates the money. It is the means that criminals use to legitimize the money.

Although the exact amount of money laundered yearly is still not known, experts estimate that money laundering schemes are in the billions of dollars – possibly as high as \$100 billion.

Money launderers operate through layers of activities designed to hinder the detection, investigation and prosecution of their activities. This is often accomplished by structuring transactions, establishing businesses specifically for the purposes of manipulating accounts, or simply coercing individuals into ignoring reporting regulations.

The Visual Analytics Solution

VisuaLinks® and Digital Information Gateway (DIG®) are an indispensable toolset for highlighting and tracking suspicious transactions that can expose illegal financial activity.

The Visual Analytics solution allows you to:

- ◆ **Access Data** – search through and extract information from a wide variety of data source at once.
- ◆ **Visualize Mass Data** – review thousands of financial transactions to identify questionable behaviors and unusual filing patterns.
- ◆ **Expose Structures** – identify and display relationships that exist between individuals and organization involved in criminal activities.
- ◆ **Examine Accounts** – reveal associations between accounts and people, banks, organizations, or other accounts.
- ◆ **Identify Duplicates** – discover indirect relationships that show addresses, accounts or ID numbers with multiple users.
- ◆ **Analyze Transactions** – uncover different types of transactions used by criminals.
- ◆ **Pinpoint Exchanges** – use chronological and geographic data to target asset seizures.

Examine Accounts – reveal associations between accounts and people, banks, organizations...

Telephone Toll Analysis

Telephone toll analysis is often underutilized in criminal investigations due to the sheer volume of data to be processed.

When properly conducted, the analysis of telephone activity can single-handedly expose a variety of deceitful behaviors including long distance and cellular phone fraud and drug trafficking patterns, as well as validate associations between people and organizations.

Data mining technologies allow investigators to uncover linkages between telephone numbers and people/organizations to expose complex communication networks, identify investigative targets, and track chronological or sequential calling patterns.

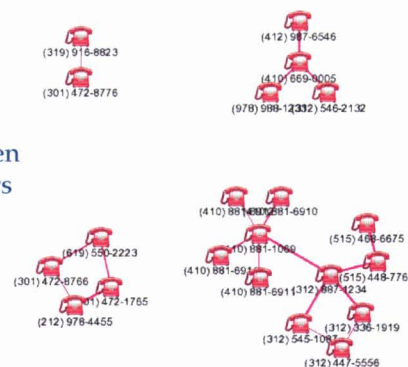
The Visual Analytics Solution

VisuaLinks® is ideally suited to identifying suspicious patterns of telephone activity.

The Visual Analytics solution allows you to:

- ◆ **Display Intense Activity** – show any type of connection between telephone numbers to expose the commonality, pathways and networks that form between large collections of numbers.
- ◆ **Develop Frequency Counts** – summarize the volume of calls from and between telephone numbers.
- ◆ **Plot Telephone Activity** – use proven placement techniques to visually reveal multiple patterns.
- ◆ **Consolidate Registered Numbers** – merge or “alias” telephone numbers to view any organization, geographic area, or phone exchange as a single element.
- ◆ **Analyze Relationships** – discover existing and emerging networks and their relationships.
- ◆ **Organize Calls** – group telephone number by area codes, exchanges, subscribers, or any other characteristic to display patterns and trends.

Display Intense Activity – show any type of connection between telephone numbers



Medical/Health Care Services

The medical and health care industries are prime candidates for data analysis and visualization tools. There are a myriad of practical applications of such tools in these industries.

The ability to access and analyze data related to illness, injury and disease occurrence, frequency and prognosis allows for accurate tracking and cause resolution of outbreaks.

Pattern analysis can also contribute to the medical community's ability to prepare for and respond to uncommon occurrences.

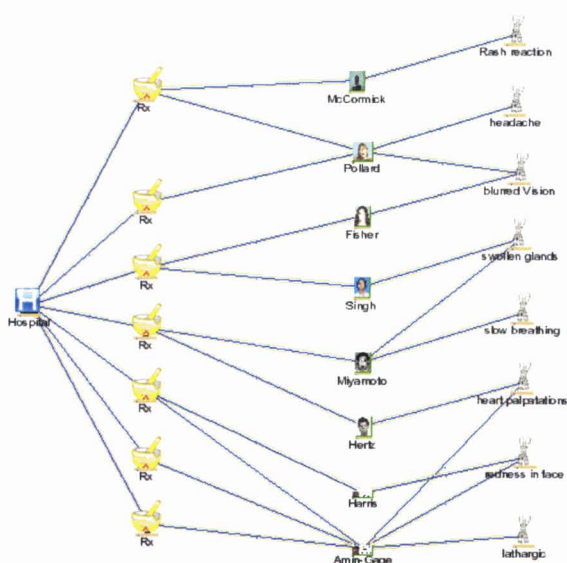
Additionally, thorough data analysis can help uncover fraud, both by and through a medical practitioner. Data analysis exposes such fraudulent situations as, unbundling, upcoding, pharmacy fraud and use of ghost patients.

The Visual Analytics Solution

VisuaLinks® is a state-of-the-art data analysis and visualization tool capable of managing, analyzing and visually presenting large volumes of data.

The Visual Analytics solution allows you to:

- ◆ **Visualize Mass Data** – work with thousands of data records with no size limitations.
- ◆ **Identify Relationships** – expose interactions and relationships between all types of data, including diagnoses, geographic areas, symptoms, etc.
- ◆ **Find Networks** – visually display and analyze clusters of related data.
- ◆ **Summarize Data** – produce statistical information on the fly.



Insurance Fraud

Insurance fraud costs the U.S. insurance industry over \$50 billion each year.

Depending on the type of insurance offered, people ranging from policy holders to doctors and lawyers have been involved in some form of insurance fraud.

Professional criminal fraud rings target carriers and flood them with thousands of fraudulent claims each year.

The task of investigating large numbers of questionable claims is formidable, slow and resource-intensive.

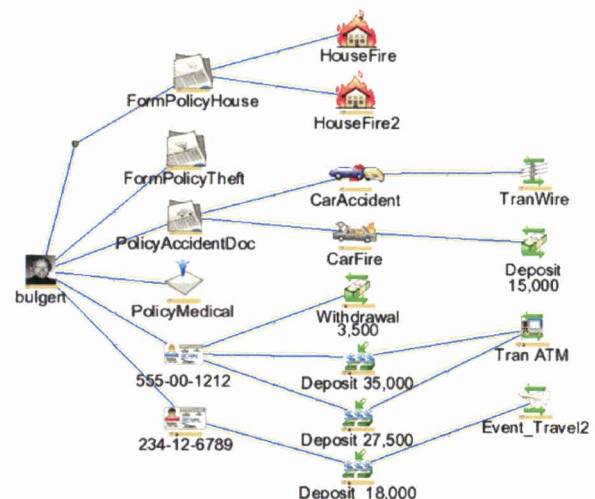
Data management and analysis can eliminate much of the basic fraud. Insurance carriers can also automate advanced warning of possible fraudulent behavior through thorough analysis and categorization of policyholders.

The Visual Analytics Solution

VisuaLinks® and Digital Information Gateway (DIG®) are ideal tools for quickly and easily identifying suspicious activity among recurring individuals and organizations. Using the advanced information retrieval capabilities of DIG to extract information from multiple data sources simultaneously and the powerful data mining, visualization and analysis capabilities of VisuaLinks.

The Visual Analytics solution allows you to:

- ◆ **Establish Connections** - expose relationships that exist between insurance customers.
- ◆ **Expose Indirect Relationships** - visually show relationships that span across individuals and organizations perpetrating fraud.
- ◆ **Identify Fraudulent Identifiers** - perform name and value matching for unparalleled data exploration.
- ◆ **Track and Correlate** - quickly identify new targets and expose patterns of activity in virtually any database.



COMMERCIAL SOLUTIONS

Businesses

Each year, fraud, waste and abuse cost private industry and government organizations billions of dollars.

Virtually every company can benefit from tracking and analyzing Internet, Email, and phone traffic, facility access, purchase orders and other accounting and administrative activities.

Every company – from large corporations to smaller business entities – must closely monitor transactions that lend themselves to fraud and embezzlement, such as, accounts payable activities and merchandise returns.

Additionally, organizations need to proactively analyze business processes to ensure that the most efficient methods are in place and being utilized.

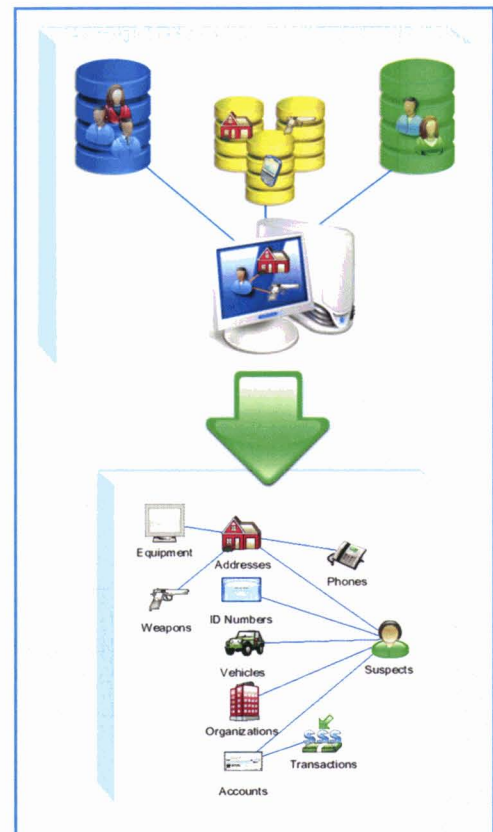
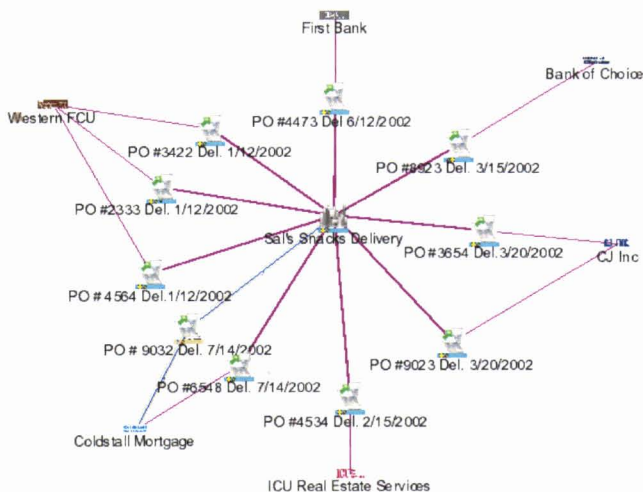
Examine Statements – visually identify deposits or checks not included in a reconciliation.

The Visual Analytics Solution

VisuaLinks® is a state-of-the-art data analysis and visualization tool that exposes costly activities that traditional audits do not reveal.

The Visual Analytics solution allows you to:

- ◆ **Analyze Processes** – expose systemic organizational or procedural issues.
- ◆ **Examine Statements** – visually identify deposits or checks not included in a reconciliation.
- ◆ **Identify Collusive Fraud** – expose questionable transactions, practices and systematic fraud in a variety of activities.
- ◆ **Inspect Sales Transactions** – show commonalities among point-of-sale terminals and sales people for products that are used in fraudulent purchases.
- ◆ **Expose Excessive Voids or Credits** – flag excessive voids where payments may be diverted for criminal gain.



Increasing Investigative Efficiency
helping analysts identify patterns more efficiently and effectively





Visual Analytics **Capabilities...**

Data Visualization

Network Mining

Advanced Link Analysis

Multiple Data Source Integration

Collaborative Analyses

Information Sharing

Business Intelligence

Relative Scoring/Ranking

Data Cleansing and Consolidation

Enterprise Web Deployment

Visual Analytics **Solutions...**

Combating Terrorism

Enabling Actionable Intelligence

Supporting Law Enforcement

Uncovering Organized Crime

Examining Telephone Tolls

Investigating Narcotics/Drug Crimes

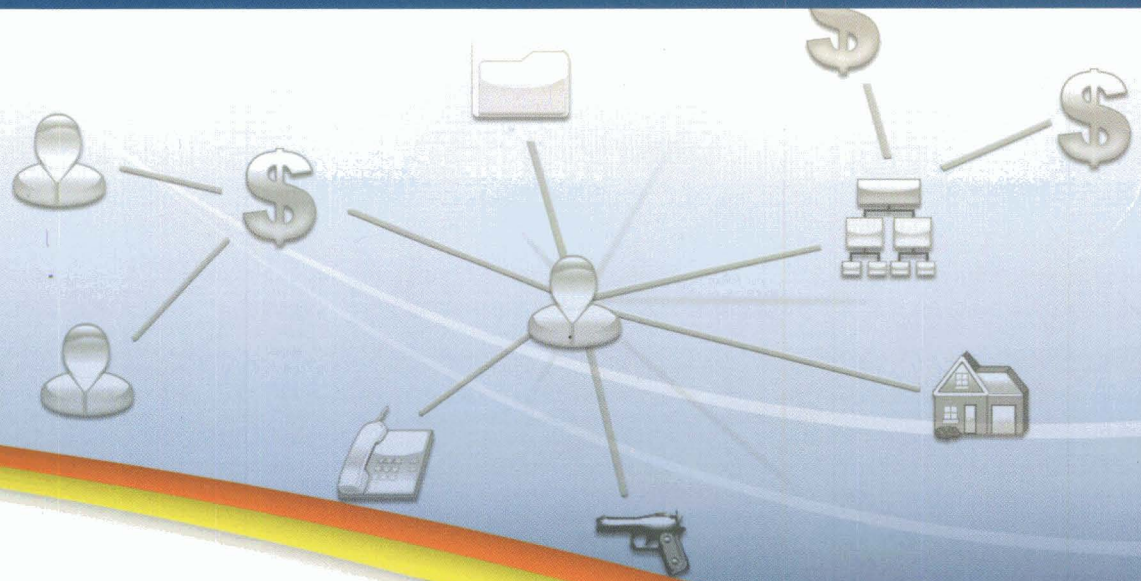
Facilitating Decision Making

Detecting Medical/Insurance Fraud

Exposing Money Laundering Trends

Analyzing Asset Management Risk

Discovering Regulatory & Compliance Issues



VISUAL ANALYTICS INC.
877-407-4VAI (4824)
<http://www.visualanalytics.com>